A NEW LEAFHOPPER OF THE GENUS HELOCHARA. (Homoptera, Cicadellidae.)

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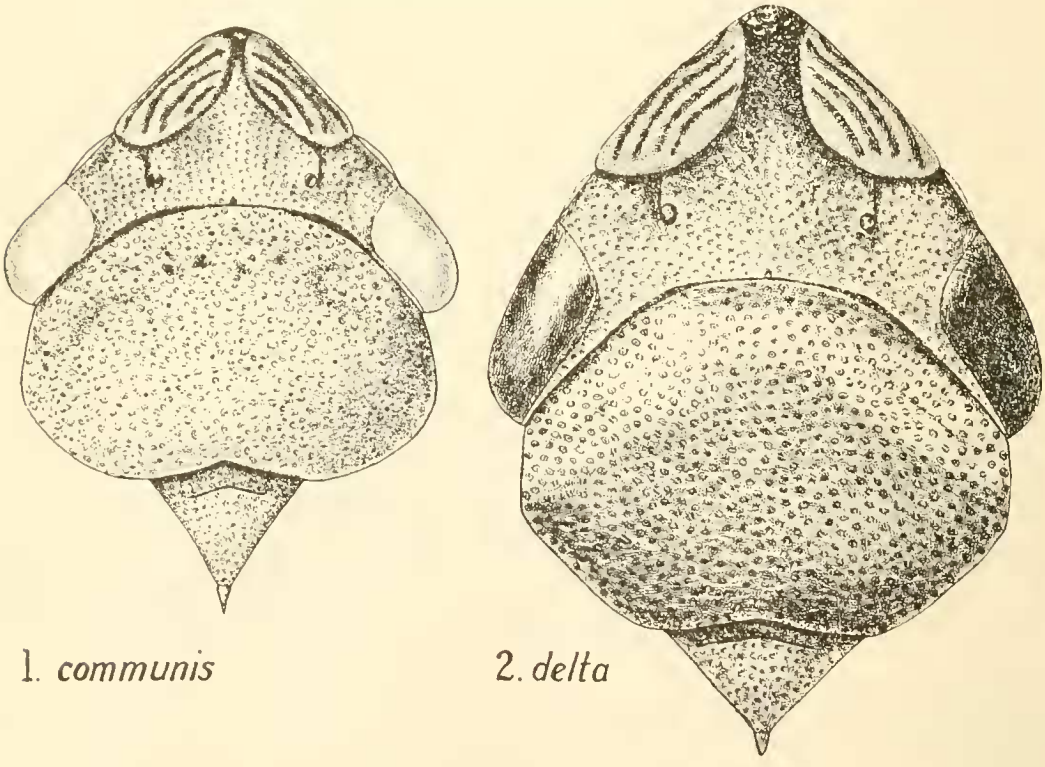
It is suspected that the new species here described is a vector of the virus that is responsible for Pierce's disease of grapes in California.

Helochara delta, new species.

Larger than *communis* Fitch and with the head more produced. Length, male 5 mm., female 6 mm.

Dorsum and sides sordid green, frequently with irregular areas of sordid yellowish green; apex of crown, 4 short arcs on antero-lateral margin of crown, and occasionally a subbasal series of irregular spots on pronotum fuscous to black. Face and venter of thorax pale sordid brown to fuscous; abdomen, except terminal portion in female, fuscous to black.



Explanation of Figures.

Head, pronotum and scutellum of (1) *Helochara communis;* (2) *H. delta.* Illustrations by Mrs. Claudelle L. Gaddis.

Crown about five-sixths as long as pronotum, apex bluntly pointed, median portion between antero-lateral arcs at narrowest point one-fourth to one-fifth as wide as distance between ocelli, much broader than in

communis. Pronotum varying somewhat in length, sometimes extended posteriorly nearly to transverse suture of scutellum. Venation and genitalia as in *communis*.

Holotype male, allotype female, and 14 male and 14 female paratypes from General Grant National Park, Calif., elevation 6,500 ft., October 16, 1941, Norman W. Frazier No. 12. Types in collection of United States National Museum, No. 56500; 4 male and 4 female paratypes returned to Mr. Frazier.

Other specimens at hand are from Kenwood and Smith River, Calif.

BOOK REVIEWS.

Chemistry of Insecticides and Fungicides: Donald E. H. Frear, Ph. D., Assistant Professor of Agricultural and Biological Chemistry, Pennsylvania State College, 8 vo., cloth, 300 pp., 31 illus., N. Y., D. Van Nostrand Co., 1942. ($4.00.)

This book is an outgrowth of lecture notes and reference compilations prepared by its author for use over a period of several years in connection with graduate courses on the subject. Its publication in the present form, however, has resulted from numerous requests by chemists, biochemists and others, who have felt that other productions otherwise somewhat similar in scope did not stress sufficiently certain phases of this rapidly growing field of chemical endeavor, and from similar requests by economic entomologists and plant pathologists who have felt that attempts by the public to control insects and plant diseases would be facilitated by a better understanding of the chemistry of those products used as insecticides and fungicides. Some idea of the general scope of the volume may be gained by a survey of the five general divisions of its contents: Under the division of (1) stomach poisons or protective insecticides (pp. 7-52) treatment is given of the arsenicals, as Paris green, London purple, calcium arsenate, lead arsenate, flourine compounds, fluorides, fluosilicates, fluoaluminates, hellebore, dinitro derivatives, phenothiazine and the like. Under the division of (2) contact poisons or eradicant insecticides (pp. 53-152) there may be found treatment of nicotine, pyrethrum, rotenone, deguelin, toxicarol, tephrosin, sumatrol, quassa, croton, the organic sulphur compounds, amines, sulphur and inorganic sulphur compounds, oils, soaps, tar oils, and the like. The fumigants also include such as hydrocyanic acid, chloropicrin, carbon disulphide, carbon